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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,165

07/21/2003

Tiet Pham

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34206 7590 05/29/2007  
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EXAMINER

TO, JENNIFER N

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

05/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/624,165

Applicant(s)

PHAM, TIET

Examiner

Jennifer N. To

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-23 are presenting for examination.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-5, 12-13, and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lacks antecedent basis:

- i. The execution of each service – claims 4-5, 12-13, 20-21;

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted As Prior Art (here after AAPA) (specification, pages 1-2).

6. As per claim 1, AAPA teaches the invention as claim including a method of scheduling a plurality of periodic events, wherein each periodic event has an associated

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periodic interval of time and an associated set of services (specification, paragraph [0002]), the method comprising:

determining when one of the plurality of periodic events occurs (specification, paragraphs [0002]-[0003]); and

distributing the execution of the services associated with that periodic event during a next periodic interval of time associated with that periodic event following the occurrence of that periodic event (specification, paragraphs [0003]-[0004]).

7. As per claim 2, AAPA teaches that wherein one of the periodic events occurs when a periodic interval of time associated with that periodic event elapses (specification, paragraph [0002]).

8. As per claim 3, AAPA teaches that wherein distributing the execution of the services includes executing successive services on successive clock ticks following a clock tick on which that periodic event occurred (specification, paragraph [0004]).

9. As per claim 4, AAPA teaches that wherein the execution of each service is either enabled or disabled (specification, paragraph [0003], the execution of each service is enabled).

10. As per claim 5, AAPA teaches that wherein the execution of each service is enable or disabled in order to implement one of a one-shot mode, a burst mode, and a continuous mode of service execution (specification, paragraphs [0003]-[0004]).

11. As per claim 6, AAPA further teaches determining, for each of the set of services associated with that periodic event, if that service is enabled for execution (specification, paragraphs [0002]-[0003]).

12. As per claim 7, AAPA teaches that wherein distributing the execution of the services associated with that periodic event during the next periodic interval of time includes distributing the execution of the enabled services associated with that periodic event during the next periodic interval of time associated with that periodic event following the occurrence of that periodic event (specification, paragraphs [0003]-[0004]).

13. As per claim 8, AAPA teaches that wherein distributing the execution of the enabled services includes executing successive enabled services on successive clock ticks following the clock tick on which that periodic event occurred (specification, paragraphs [0003]-[0004]).

14. As per claim 9, AAPA teaches the invention as claim including a system comprising:

a periodic event scheduler that schedules a plurality of periodic events, wherein each periodic event has an associated periodic interval of time and an associated set of services (specification, paragraphs [0002]-[0003]);

a tick generator that generates interrupts in response to clock ticks (specification, paragraph [0002]); and

an interrupt handler that receives the interrupts from the tick generator and executes the periodic event scheduler in response to the interrupt (specification, paragraph [0003]);

wherein the periodic event scheduler (specification, paragraph [0003], periodic event scheduler):

determines when one of the plurality of periodic events occurs (specification, paragraph [0003]); and

distributes the execution of the services associated with that periodic event during a next periodic interval of time associated with that periodic event following the occurrence of that periodic event (specification, paragraph [0003]).

15. As per claims 10-16, they are rejected for the same reason as claims 2-8 above.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted As Prior Art (here after AAPA) (specification, pages 1-2), and in view of Palazzi III et al. (hereafter Palazzi) (U.S. Patent No. 5379421).

18. As per claim 17, AAPA teaches the invention substantially as claim including:  
a tick generator that generates interrupts in response to clock ticks (specification, paragraph [0002]); and  
control logic coupled to the interface that:

determines when one of a plurality of periodic events occurs, wherein each periodic event has an associated periodic interval of time and an associated set of services (specification, paragraphs [0002]-[0003]); and

distributes the execution of the services associated with that periodic event during a next periodic interval of time associated with that periodic event following the occurrence of that periodic event (specification, paragraph [0003]).

19. AAPA did not specifically teach a telecommunication device comprising: an interface that couples the telecommunication device to a communication medium.

20. However Palazzi teaches a telecommunication device comprising: an interface that couples the telecommunication device to a communication medium (col. 3, line 68 through col. 4, line 37).

21. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of AAPA and Palazzi because AAPA providing software system that controlling the operation of external hardware, Palazzi providing a telecommunication system that including a control software system that capable of controlling the operation of external hardware, and an interface that couples the telecommunication device to a communication medium. Therefore, one would be motivated to combined the teaching of AAPA and Palazzi since Palazzi teaches the deficiencies of AAPA's system would improve the integrity of AAPA 's system by allowing future modification of the system (Palazzi; col. 4, lines 36-37).

22. As per claim 18, AAPA teaches that wherein one of the periodic events occurs when a periodic interval of time associated with that periodic event elapses (specification, paragraph [0002]).

23. As per claim 19, AAPA teaches wherein the control logic distributes the execution of the services by executing successive services on successive clock ticks following a clock tick on which that periodic event occurred (specification, paragraph [0004]).

24. As per claim 20, AAPA teaches that wherein the execution of each service is either enabled or disabled (specification, paragraph [0003], the execution of each service is enabled).



25. As per claim 21, AAPA teaches that wherein the control logic also determines, for each of the set of services associated with that periodic event, if that service is enabled for execution (specification, paragraphs [0002]-[0003]).

26. As per claim 22, AAPA teaches wherein the control logic distributes the execution of the services associated with that periodic event during the next periodic interval of time by distributing the execution of the enabled services associated with that periodic event during the next periodic interval of time associated with that periodic event following the occurrence of that periodic event (specification, paragraphs [0003]-[0004]).

27. As per claim 23, AAPA teaches that wherein the periodic event scheduler distributes the execution of the enabled services by executing successive enabled services on successive clock ticks following the clock tick on which that periodic event occurred (specification, paragraphs [0003]-[0004]).

### ***Conclusion***

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chechik et al. (U.S. Publication No. 2004/0158832), and Vargas et al. (U.S. Publication No. 2002/0184288) teach method and system for controlling periodic event execution.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To  
Examiner  
Art Unit 2195

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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